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Patent Application No. 10/586,072

Applicant: Brough et al.

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DECLARATION UNDER 37 C.F.R. § 1.132 OF DOUGLAS E. BROUGH, PH.D.

- I, Douglas E. Brough, am Executive Director of Vector Sciences at GenVec, Inc. and the inventor of the subject patent application.
 - 2. The following experiments were performed at my direction.
- 3. The efficiency of adenoviral vector-mediated gene delivery and expression in inner ear tissues was tested in a utricle culture model. Specifically, gene expression from adenoviral vectors based on serotype 35 (Ad35) and serotype 28 (Ad28), which are of subgroup B and D, respectively, was compared to gene expression from an adenoviral vector based on serotype 5 (Ad3), which is of subgroup C. Utricle tissue was dissected from adult CBA mice, and cultures were established (see, e.g., Staecker et al., Otol. Neurotol., 28(2): 223-231 (2007)). E1-deleted adenovirus vectors expressing the green fluorescent protein (GFP) from the CMV promoter were prepared using Ad35, Ad28, and Ad5 serotypes. The utricle cultures were infected with the resulting adenoviral vectors, and GFP expression was evaluated.
- 4. The results of the above-described experiment suggested that the Ad28 and Ad35 vectors exhibited enhanced delivery to the utricle cultures, as compared to the Ad5 vector. In order to determine if binding and entry of the Ad28 vector to utricle tissue was

